

SC-04-27

4th Meeting of the Southern Indian Ocean Fisheries Agreement (SIOFA) Scientific Committee

25–29 March 2019, Yokohama, Japan

Preliminary ecological risk assessment for SIOFA teleosts

(RESTRICTED)

Relates to agenda item: 7

Working paper Info paper

Delegation of Australia

Abstract

This paper updates the SIOFA SC on a preliminary ecological risk assessment for SIOFA teleosts. The preliminary species list was developed using catch records in the SIOFA databases and information from annual reports submitted by SIOFA Contracting Parties. The species list is incomplete due to the developmental nature of the SIOFA databases and associated issues, some of which are captured in the paper 'SIOFA species list' submitted to SERAWG1 and SC4. The assessment applies Productivity-Susceptibility Analysis (PSA) and Sustainability Assessment for Fishing Effects (SAFE) methods to assess the relative vulnerability of teleosts to demersal trawl, midwater trawl, 'shallow trawl' (Saya de Malha bank fishery), demersal line and demersal gillnet gears in the SIOFA area. Fishing effort data were provided by most Contracting Parties for the 2012-2016 period; however, some effort data are missing. Species distribution data was sourced from aquamaps.org (80-100% probability of occurrence layer was used). Life history attribute data was sourced from the CSIRO database that underpins the CSIRO ERA online tool and was available for most species. The results are preliminary and cannot currently be used for management advice on species status or fishing mortality. Once refined, the results could be used for prioritising assessment options (in line with the SIOFA stock assessment framework), or for informing requirements for additional data collection. The next step is to refine the SIOFA species list and the assumptions used in the assessment, and to encourage collaboration with other SIOFA Contracting Parties.
